

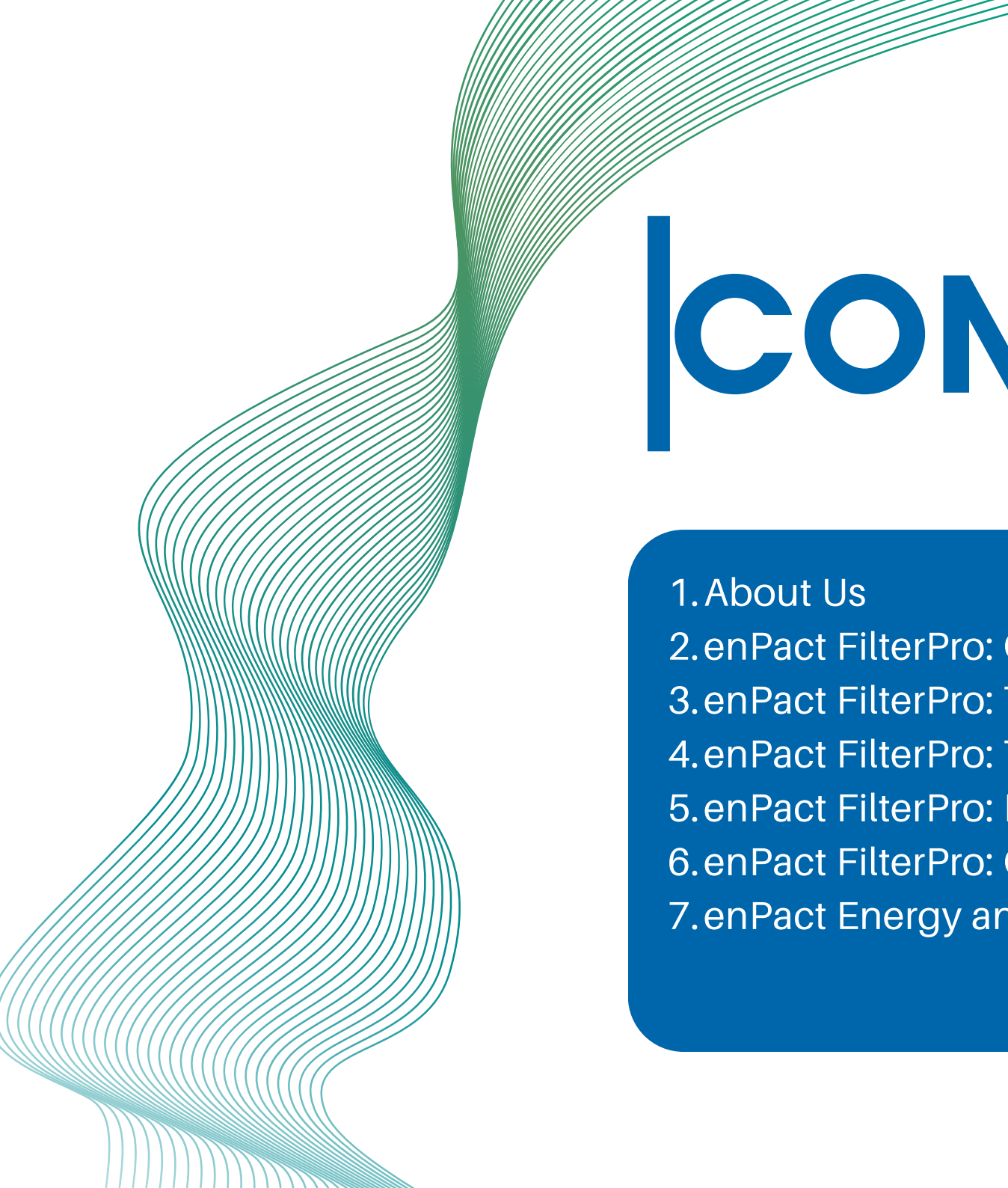


enPact[®] FilterPro

Unique technology for carbon, cost and energy reduction with
guaranteed energy savings



INNOVATIVE ENERGY AND
CARBON REDUCTION
SOLUTIONS



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ABOUT US

Engineering energy efficiency that pays off.

Emissis (Electrical Mechanical & Cooling Ltd) is a specialist engineering firm with over 20 years of experience in delivering high-performance mechanical and electrical solutions. We provide independent, critical power and cooling services tailored to industrial and commercial environments across the UK.

Being independent means we're not tied to specific products - we choose the right technologies to meet your site's exact needs. Backed by a skilled in-house engineering team, we're known for our technical rigour, compliance expertise, and project efficiency.

Our Mission

To help clients reduce energy costs, extend asset lifespan, and accelerate carbon reduction - without disrupting operations.

Our Core Technology: enPact

We deliver a suite of globally patented energy-saving solutions under the enPact brand, designed to optimise energy use across key systems:

- enPact Refrigeration & Cooling
- enPact Chillers
- enPact Electrical Optimisation
- enPact Energy & Carbon Management
- enPact Engineered Solutions

We serve a wide range of sectors including:

- Kitchens, Bars & Restaurants
- Food Retail & Production
- Heavy Industry & Manufacturing
- Hospitality & Built Environment

From initial survey through to installation, monitoring, and payback verification - we deliver full-service energy optimisation that reduces cost and carbon for some of the UK's most recognised businesses.



enPact[®] FilterPro

Reduce electricity waste at the source with up to 18% site-wide savings through power quality optimisation.

enPact FilterPro is an advanced power conditioning solution designed to help businesses reduce their electricity costs by up to 18%—without replacing or disrupting existing systems. By improving the flow and quality of electrical energy across your site, FilterPro directly addresses the invisible energy losses caused by voltage fluctuations, load switching, and power system noise.

It's a smart, fully retrofit solution ideal for sites with high concentrations of motors, compressors, refrigeration systems, and other inductive loads.

Employing the principles of spintronics, the enPact FilterPro aligns magnetic wave energy with the power system, activating previously unusable electron spin energy during the standard power supply process. This activation enhances the transmission efficiency of electrical energy.

Furthermore, the technology optimises current flow through the supply of magnetic wave energy, facilitating energy generation during consumption. Ultimately, it reduces overall energy consumption by compensating for lost energy, improving the power environment, and curbing unnecessary power usage.





The Process for enPact FilterPro:

1. Acquire Half Hourly Data & Energy Loads
2. Proposal
3. Guaranteed Savings
4. Installation
5. Savings report

Performance Variations According to Load Type:

- Higher electrical density correlates with improved power efficiency.
- Electrical density diminishes when it interacts with a load.
- Notably, the density of electricity is lower in inductive loads compared to resistive loads.
- This product is designed to enhance the reduced electrical density.
- Consequently, it exhibits superior performance under inductive loads.

The optimal locations for the application of inductive loads include a variety of settings such as hotels, restaurants, factories, and supermarkets. The implementation of these loads can yield energy savings of up to 18%.

WHAT WE DO:

- Assess the type and load of your site
- Estimate your potential savings rate
- Calculate payback period
- Analyse current trends in electricity consumption
- Conduct a site survey
- Monitor energy usage over one week and provide guaranteed savings recommendations



**OPTIMISATION OF
POWER SUPPLY**



**REDUCED ELECTRICITY
CONSUMPTION**



LOWER EXPENSES



**INCREASED
PRODUCTIVITY**



**IMPROVE
PROFITABILITY**



enPact[®] FilterPro THE BENEFITS

- **Environmental Improvement:**

The continuous depletion of energy resources necessitates a reduction in energy consumption through enhancements in the electrical energy environment.

- **Efficiency Enhancement:**

Our product, which incorporates cutting-edge Carbon Nanotube (CNT) technology, effectively mitigates noise generated during load operations, thereby promoting energy savings.

- **Energy Cost Savings:**

With rising electricity prices, enPact FilterPro offers a viable solution for reducing your energy bills.

- Lifespan of 20 years
- 8-18 month payback
- Energy saving rate up to 18%
- Fast installation
- Saves costs on electricity bills

SECTORS

A

Heavy industry, manufacturing facilities and equipment, theme park.

B

Light industry, manufacturing facilities and equipment.

C

Facilities with high operating rate of heating and cooling facilities. (supermarkets, department store, grocery store)

D

Buildings, hotel, restaurant and domestic property.

E

Facilities with high proportion of lighting in total electricity use. (concert halls, stadiums)

MODEL	SECTOR				
	A	B	C	D	E
NF-1000	Under 6.5 Months	Under 8 Months	Under 10 Months	Under 13 Months	Under 20 Months
NF-500 IPF-300	Under 6.5 Months	Under 8 Months	Under 10 Months	Under 13 Months	Under 20 Months
NF-300 IPF-300	Under 6.5 Months	Under 8 Months	Under 10 Months	Under 13 Months	Under 20 Months
NF-200 IPF-200	Under 6.5 Months	Under 8 Months	Under 10 Months	Under 13 Months	Under 20 Months
NF-100 IPF-100	Under 6.5 Months	Under 8 Months	Under 10 Months	Under 13 Months	Under 20 Months
NF-50 IPF-50	Under 6.5 Months	Under 8 Months	Under 10 Months	Under 13 Months	Under 20 Months
NF-30 IPF-30	Under 6.5 Months	Under 8 Months	Under 10 Months	Under 13 Months	Under 20 Months
NF-20 IPF-20	Under 6.5 Months	Under 8 Months	Under 10 Months	Under 13 Months	Under 20 Months
NF-20 IPF-20	Under 11 Months	Under 13 Months	Under 16 Months	Under 21.5 Months	Under 32.5 Months

Our EnOS platform integrates on-site operational technology with cloud-based intelligence to provide real-time energy data, along with data-driven carbon monitoring, reporting, and abatement solutions.

Energy Monitoring

- Monitor your energy consumption in real-time with our advanced IoT technology.
- Identify energy conservation measures utilising the capabilities of artificial intelligence.
- Receive alerts in the event of overconsumption in any of your showrooms.

Carbon Reporting

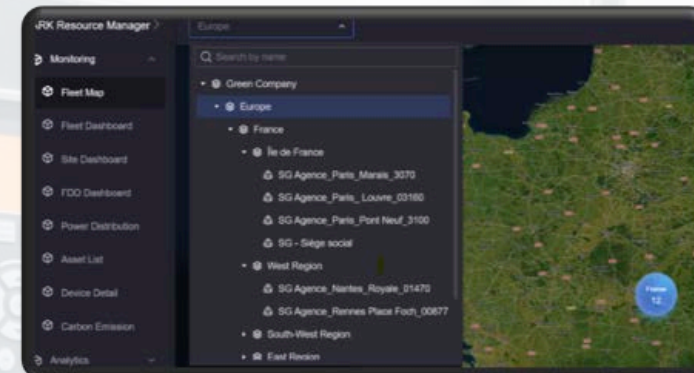
- Utilise real-time data to assess, benchmark, and report CO2 emissions both at individual sites and across the entire portfolio.
- Strategically plan and prioritise abatement initiatives based on these assessments.

Savings Identification

- Analyse actual consumption data in comparison to your established energy baseline to identify discrepancies.
- Integrate a real-time AI module to monitor and report on energy savings.
- Analyses site-level performance to detect inefficiencies and deliver data-driven optimisation strategies to reduce energy - generating on average an additional potential saving of 25%.

Track Performance Against Targets

- Establish energy and carbon targets in alignment with the Science Based Targets initiative (SBTi) and monitor the performance of each showroom relative to these objectives.



Portfolio View
asset View
Site View

Customisable site
dashboard:
aggregated energy
consumption data



Set up energy
performance KPI's
based on the site's
specifics



enPact[®]

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